

## ABSTRACT OF THE DISCLOSURE

There is provided a current collector for use in a secondary battery on which active material ~~coating~~ <sup>coated on</sup> both sides of a metal foil are difficult to drop out.

- 5        The metal foil is provided with a large number of ~~penetrated~~ <sup>penetrating</sup> holes, ~~the~~ periphery of ~~the~~ <sup>which are</sup> ~~penetrated holes~~ is formed into a complicated shape, and active material, binder, etc. are intruded ~~on~~ <sup>to</sup> each periphery, whereby the active material, etc. ~~coating~~ <sup>coated on</sup> both sides of the current collector consisting of the metal foil are prevented from dropping out. An area S of the ~~penetrated~~ <sup>penetrating</sup> holes is in the range of 0.05 to 0.50 mm<sup>2</sup>. Supposing that a periphery length of the ~~penetrated hole~~ is M, and a periphery length of a virtual circle having the area S of the ~~penetrated hole~~ is N, a value M/N is in the range of 1.30 to 100. The current collector having such a large number of ~~penetrated~~ <sup>penetrating</sup> holes is obtained by passing a metal foil without ~~a~~ hole through between a concavo-convex roll having a large number of convex parts and a smoothing roll. If any burr is produced at each periphery edge of the ~~penetrated~~ <sup>penetrating</sup> holes, the current collector is further caused to pass through between a pair of metal smoothing rolls, whereby the burr produced on each periphery edge of the ~~penetrated~~ <sup>penetrating</sup> holes can be removed.